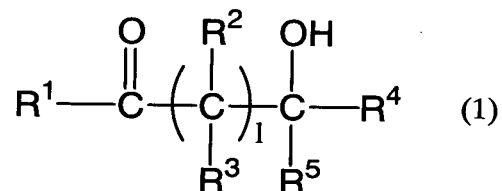


WHAT IS CLAIMED IS:

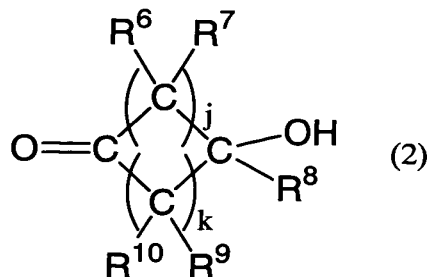
1. A photosensitive resin precursor composition comprising:

- (a) a heat resistant resin precursor polymer;
- (b) a radiation sensitive compound; and
- (c) a solvent expressed by formula (1):



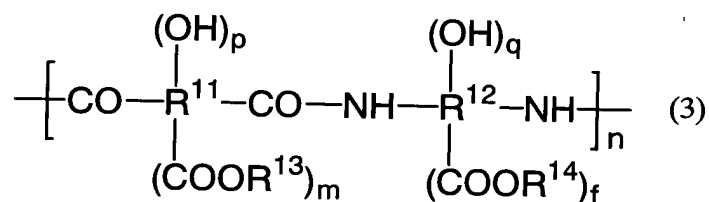
wherein  $\text{R}^1$  represents an alkyl group having a carbon number in the range of 1 to 3,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ , and  $\text{R}^5$  are each selected from among hydrogen and alkyl groups having carbon numbers in the range of 1 to 3, and 1 represents an integer in the range of 0 to 3.

2. A photosensitive resin precursor composition according to Claim 1, wherein the solvent is expressed by formula (2):



wherein  $R^6$  to  $R^{10}$  are each selected from among hydrogen and alkyl groups having carbon numbers in the range of 1 to 3, and  $j$  and  $k$  are each an integer in the range of 0 to 3 and satisfy the relationship  $j + k \geq 2$ .

3. A photosensitive resin precursor composition according to Claim 1, wherein the heat resistant resin precursor polymer comprises a structural unit expressed by formula (3):

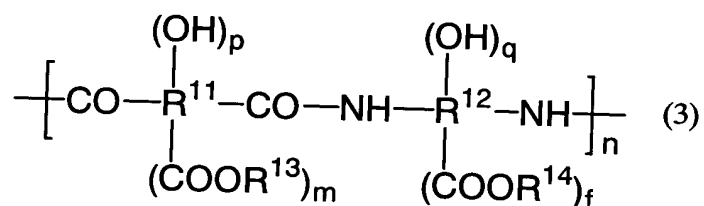


wherein  $R^{11}$  and  $R^{12}$  are each an organic group having a carbon number of at least 2 and a valence in the range of 2 to 8,  $R^{13}$  and  $R^{14}$  are each selected from among hydrogen and organic groups having a carbon number in the range of 1 to 20,  $n$  is in the range of 10 to 100000,  $m$  and  $f$  are each an integer in the range of 0 to 2, and  $p$  and  $q$  are each an integer in the range of 0 to 4 and satisfy the relationship  $p + q > 0$ .

4. A photosensitive resin precursor composition according to Claims 1, wherein the radiation sensitive

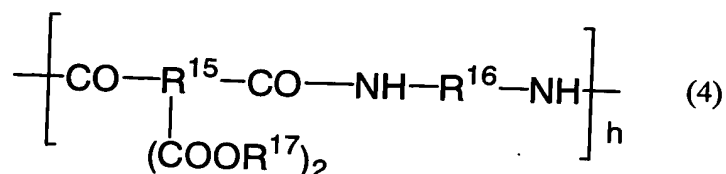
compound is a quinone diazide.

5. A photosensitive resin precursor composition according to Claims 1, wherein the heat resistant resin precursor polymer comprises a structural unit expressed by formula (3) and wherein the radiation sensitive compound is a quinone diazide.



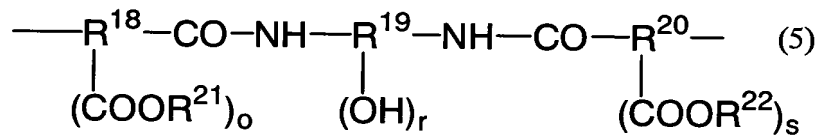
wherein  $\text{R}^{11}$  and  $\text{R}^{12}$  are each an organic group having a carbon number of at least 2 and a valence in the range of 2 to 8,  $\text{R}^{13}$  and  $\text{R}^{14}$  are each selected from among hydrogen and organic groups having a carbon number in the range of 1 to 20,  $n$  is in the range of 10 to 100000,  $m$  and  $f$  are each an integer in the range of 0 to 2, and  $p$  and  $q$  are each an integer in the range of 0 to 4 and satisfy the relationship  $p + q > 0$ .

6. A photosensitive resin precursor composition according to Claim 1, wherein the heat resistant resin precursor polymer comprises a structural unit expressed by formula (4):



wherein  $R^{15}$  represents an organic group having a carbon number of at least 2 and a valence in the range of 2 to 8,  $R^{16}$  represents an organic group having a carbon number of at least 2 and a valence in the range of 2 to 6,  $R^{17}$  represents an organic group having a carbon-carbon unsaturated double bond capable of dimerization or polymerization by actinic radiation and having a carbon number in the range of 1 to 30, and  $h$  is in the range of 10 to 100000.

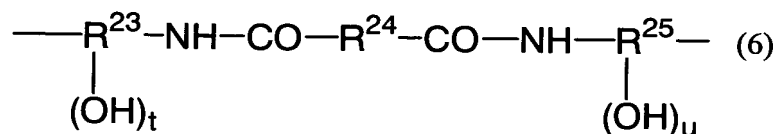
7. A photosensitive resin precursor composition according to Claim 3, wherein  $R^{11}(\text{COOR}^{13})_m(\text{OH})_p$  in formula (3) is expressed by formula (5):



wherein  $R^{18}$  and  $R^{20}$  each represent an organic group having a carbon number in the range of 2 to 20 and a valence in the range of 2 to 4,  $R^{19}$  represents an organic group having a carbon number in the range of 3 to 20 and a valence in the range of 3 to 6 and having a hydroxy group,  $R^{21}$  and  $R^{22}$  are each selected from among hydrogen and organic groups having carbon numbers in the range of 1 to 20,  $o$  and  $s$  each

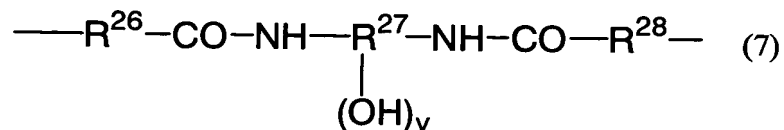
represent an integer in the range of 0 to 2, and r represents an integer in the range of 1 to 4.

8. A photosensitive resin precursor composition according to Claim 3, wherein  $R^{12}(COOR^{14})_f(OH)_q$  in formula (3) is expressed by formula (6):



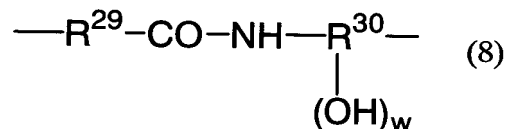
wherein  $R^{23}$  and  $R^{25}$  each represent an organic group having a carbon number in the range of 2 to 20 and a valence in the range of 3 to 4 and having a hydroxy group,  $R^{24}$  represents a divalent organic group having a carbon number in the range of 2 to 30, and t and u each represent an integer of 1 or 2

9. A photosensitive resin precursor composition according to Claim 3, wherein  $R^{12}(COOR^{14})_f(OH)_q$  in formula (3) is expressed by formula (7):



wherein  $R^{26}$  and  $R^{28}$  each represent a divalent organic group having a carbon number in the range of 2 to 20,  $R^{27}$  represents an organic group having a carbon number in the range of 3 to 20 and a valence in the range of 3 to 6 and having a hydroxy group, and  $v$  represents an integer in the range of 1 to 4.

10. A photosensitive resin precursor composition according to Claim 3, wherein  $R^{12}(COOR^{14})_f(OH)_g$  in formula (3) is expressed by formula (8):



wherein  $R^{29}$  represents a divalent organic group having a carbon number in the range of 2 to 20,  $R^{30}$  represents an organic group having a carbon number in the range of 3 to 20 and a valence in the range of 3 to 6 and having a hydroxy group, and  $w$  represents an integer in the range of 1 to 4.

11. A photosensitive resin precursor composition according to Claim 3, wherein  $m$ ,  $f$ , and  $p$  in formula (3) are

0.

12. A photosensitive resin precursor composition according to Claim 3, wherein, in formula (3), m is 2 and f is 1 or 2.